

2006 (7TH) SALMON APPLICATION FORMS

IN-STREAM HABITAT



JUNE 19, 2006

FOR USE IN 2006 GRANT CYCLE ONLY

Application Authorization Memorandum

Each organization submitting a project must complete this form.

TO:	Salmon Recovery Funding Board (SRFB) PO Box 40917 Olympia, Washington 98504-0917
THROUGH:	_Hood Canal Coordinating Council (lead entity name)
FROM:Skokomis	h Indian Tribe (applicant_name)
application for financi to grant funding from is prepared with know Further, we agree to may be necessary to state and federal state aware that the grant, application materials, property of IAC/SRFB	ty identified above, the SRFB is hereby requested to consider this al assistance for the Salmon Recovery project(s) described below and such State and Federal sources as may be available. This application whedge of and in compliance with SRFB's policies and procedures. Cooperate with the SRFB by furnishing such additional information as execute a SRFB Project Agreement and to adhere to all appropriate utes governing grant monies under the Project Agreement. We are if approved, is paid on a reimbursement basis. We agree that all including photos, slides, site drawings, maps, etc., become the and may be used by IAC/SRFB for education, information, or other oses in publications, presentations or on the IAC/SRFB web site. South Fork Skokomish River LWD Enhancement Project
(Attach list	<u>-</u>
if necessary)	
correct. In addition, I. committed to the abo	e best of our knowledge, the data in this application is true and /we certify that the matching resources identified in the grant are ve project. I/we acknowledge responsibility for supporting all non-ind donations should they not materialize.
	(signature) (date)
Printed Name and Tit	le:Marty Ereth_ Habitat Biologist

1. General Application Information (ENTER ON PRISM TAB 1) Project Name Project Type (check one) X Restoration only (In-stream Habitat) Combined (acquisition and restoration)

		ant / Organization Info			
Organization Na	Organization Name: Skokomish Indian Tribe				
Organization Typ	pe (check one)				
☐ City/Tow	n	□ County	☐ Private Landowner		
□ Conserva	tion District	XX Native American Tribe	☐ Non-profit Organization		
□ RFEG		☐ Special Purpose District	☐ State Agency		
Organization Address					
Address	North 80 Tribal	Center Road			
OU /T					
City/Town	Skokomish Natio	on			
State, Zip	WA, 98584				
Telephone #	(360) 877-2110	FAX # (360) 877-51	48		
Internet e-mail a	address: marty@	skokomish.org Website URL: v	www.skokomish.org		

3. Project Contact Information Complete one for each contact. (ENTER ON PRISM TAB 1 – SEARCH FOR PERSON)			
X Mr. □ Ms.	Title		
First Name Marty		Last Name Ereth	
X Primary Contact	OR Alternate Contact		
Contact Mailing Addre	ress		
Address North	n 541 Tribal Center Rd.	Work Telephone # (360) 877-2110	
City/Town Skoko	omish Nation	FAX # (360)	
State, Zip WA,	98584	Internet e-mail address	
		marty@skokomish.org	

4a. Goal and Objective and Measurements In-Stream Habitat (Restoration projects only)

Select <u>one</u> goal and <u>one</u> objective that best fits your project and respond all to the measurements for that goal and objective. (ENTER GOAL AND OBJECTIVE ON PRISM TAB 2; SAVE, THEN ENTER MEASUREMENT RESPONSES ON PRISM TAB 6)

Goal:	The goal of the project and habitat in salmon	x	
	-	e of the project is to increase instream ning, and resting areas.	
	Measurement:	Length of instream habitat treated, except for bank stabilization? [This refers to meander miles of instream habitat treatments, except for bank stabilization treatments. Count actual stream length treated.]	4 Miles
	Measurement:	Length of stream bank protected throughland acquisition/easement/lease (If both sides add lengths)	Miles
	Measurement:	Length of stream section treated (one side only)	Miles
	Measurement:	Length of streambank treated for stabilization? [The number of miles of streambank stabilization treatment. Add length treated on both sides when both sides are stabilized. Add one side when one side is treated.]	Miles

5. Short Description of Project

Describe project, what will be done, and what the anticipated benefits will be in 1500 characters or less.

(ENTER ON PRISM TAB 2)

NOTE: Many audiences, including the SRFB, SRFB's Review Panel, media, legislators, and the public who may inquire about your project use this description. Provide as clear, succinct and descriptive an overview of your project as possible – many will read these 1-2 paragraphs!

The description should state what is proposed. Identify the specific problems that will be addressed by this project, and why it is important to do at this time. Describe how, and to what extent, the project will protect, restore or address salmon habitat. Describe the general location, geographic scope, and targeted species/stock. This short description should be the summary of the detailed proposal set out under Evaluation Proposal, with particular emphasis on questions I-IV.

The database limits this space to 1500 characters (including spaces); any excess text will be deleted.

This project proposed by the Skokomish Tribe is to design/install log jam structures to enhance the density and distribution of natural large woody debris in the upper South Fork Skokomish River and tributary confluence's primarily with the use of helicopters. Heavy equipment and hand tools may also be used in certain areas.

The SF Skokomish River is located in Mason County and the Skokomish/Dosewallips WRIA 16 (Watershed Resource Inventory Area). It drains an area of approximately 129 square miles (includes Vance Creek) with coniferous forests being the primary land cover. The majority of the SF Skokomish River is located within the Olympic National Forest with about 14% of the lower basin owned by the Green Diamond Resource Company (formerly Simpson Timber Co.). Tacoma Power owns a critical parcel in the proposed restoration reach. A small portion of the headwaters are located in the Olympic National Park. The lower 3 miles are located in the Skokomish Valley and are dominated by residential development and agriculture.

Reaches targeted for wood include an area between the canyon and LeBar Creek that was cleared for a proposed dam/reservoir in the 1950's-70's but never built. Riparian forests and uplands in this reach and throughout the basin have been heavily roaded/logged and have reduced wood supplies. Other potential locations for wood additions are at tributary mouths (Church, Pine, and Cedar) where the Forest Service has noted connectivity and low flow concerns.

6. Summary of Funding Request and Match Contribution Remember to update this section whenever changes

Remember to update this section whenever changes are made to your cost estimates.

(ENTER ON PRISM TAB 3)

TOTAL PROJECT COST (A + B) (Sponsor Match & SRFB Contribution)			\$360,000
A. Sponsor Match Contribution (15%	mi	nimum is required for	match)
Appropriation/Cash	\$		
Bonds - Council			
Bonds - Voter	\$		
Cash Donations	\$		
Conservation Futures	\$		
Donations			
Donated Equipment	\$		
Donated Labor			
Donated Land	\$		
Donated Materials	\$	90,000 LWD (USFS)	
Donated Property Interest	\$		
Force Account			
Force Acct - Equipment	\$		
Force Acct - Labor	\$		
Force Acct - Material	\$		
Grants*			
Grant - Federal	\$	80,000 (HCSEG-NFHI))
Grant - Local	\$		
Grant - Private	\$		
Grant - State	\$		
Total Sponsor Match Contribution			\$170,000
•			15% Minimum Match Required of A. TOTAL PROJECT COST
B. SRFB Contribution (grant request)			\$190,000 \$5,000 Minimum Request
*Note, be sure to identify the name a Application Questionnaire Section.	ind	d type of any match	ing grant in the
Г			

8. Restoration Cost Estimate In-Stream Habitat

IN-STREAM HABITAT includes those freshwater items that affect or enhance fish habitat below the ordinary high water mark of the water body. Items include work conducted on or next to the channel, bed, bank, and floodplain by adding or removing rocks, gravel, or woody debris. Other items necessary to complete the project may include livestock fencing, water conveyance, and plant removal and control.

Complete only items that apply to your project.

TOTAL COST must include the SRFB and Sponsor's Match Contribution.

Use only whole dollar amounts.

(ENTER ON PRISM TAB 5)

Item	Unit	Qty.	Total Cost		Description (60 characters max.)
Bank stabilization	Linear ft		10141 0001	Describe	(ee characters maxiy
Carcass placement	Linear ft			Describe	
Channel connectivity	Linear ft			Optional	
Channel reconfiguration	Linear ft			Describe	
Complex log jams	Each			Optional	
Deflectors/barbs	Each			Optional	
Dike removal/setback	Linear ft			Optional	
Log control (weir)	Each			Optional	
Off-channel habitat	Acres			Describe	
Permits	Lump sum			Optional	
Plant removal/control	Acres			Optional	
Riparian plant installation	Sq ft			Describe	
Riparian plant materials	Each			Describe	
Rock control (weir)	Each			Optional	
Roughened channel	Linear ft			Describe	
Signage	Each			Describe	
Site maintenance	Lump sum			Describe	
Spawning gravel placement	Sq yds			Optional	
Wetland restoration	Acres			Describe	
Woody debris placement	Each	250	276,920	Describe	Helicopter placement -LWD
Sales Tax					
Sub-Total					
Architecture, Engineering, & Admin. (30% of Sub-Total)			83,076		
TOTAL COSTS			360,000		

9. Application Questionnaire

All applicants must answer the following questions. (ENTER ON PRISM TAB 8)

Could we add additional questions?

Do you have a preliminary design? If so please attach in PRISM

Cost Efficiencies

For any grants listed in the Summary of Funding Request and Match Contribution Section, are there any restrictions on the use of these grant funds? When and how long will the grant funds be available to this project? Are your matching funds considered state or federal dollars?

The grant funds are from the National Fish Habitat Initiative (NFHI) administered by the USFWS. The applicant for those funds is the Hood Canal Salmon Enhancement Group (HCSEG). These funds are available as match funds. The USFWS maintains they will work with the USFS on ESA consultation (aquatic and terrestrial) reducing our costs associated with these activities. USFWS believes that regional priorities will be known by December 2006 and final decisions will be made in early spring of 2007. The USWFS representative believes the HCSEG's NFHI application is strong and has an excellent chance of funding competing on the national level.

Describe the type of donated labor (skilled and unskilled), donated equipment, and donated materials that will be used for this project, identified in the Summary of Funding Request and Match Contribution Section.

The USFS will be donating the LWD needed for the project. The amount will be based on final plans designs and market rates. The USFS will be responsible for locating, stockpiling and staging wood materials and post project monitoring.

Land Ownership

What type of landowner currently owns the property? (Federal, Local, Private, State or Tribal.)

Federal, the U.S. Forest Service and a parcel owned by Tacoma Public Utilities.

What is the current land use of the site, and its history? Describe past human uses and salmon habitat functions.

The SF Skokomish River and the NF Skokomish River make up the Skokomish River mainstem. The Skokomish River flows through a fertile farm valley and the Skokomish Indian Reservation before entering the Great Bend of Hood Canal (FIGURE 1).

The current land use is forestry and recreation. The area has been heavily logged and roaded over the last 50 to 60 years. Riparian forests were removed and road failures have added tons of sediment to tributary streams. Wood loading in many areas is poor including the reach from LeBar downstream to the top of the canyon at Homan flats (photos 1-4). This reach has been called the "bathtub ring" because of a noticeable line of different age timber on the slopes which was going to be the approximate reservoir level (that was never constructed). The area was heavily logged because it was assumed that it would be under water. There is a lack of wood in this 4-mile reach and the channel possesses a plane bed morphology that should respond well to wood loading. Although much of the channel and riparian forests along the SF Skokomish River are in relatively good condition, tributary streams were heavily logged and roaded leading to elevated sediment inputs and loss of in-channel woody debris and future recruitment potential. The confluence and

lower reaches of Church Creek (photo 5 -7) and will be targeted for wood additions. Tributary junctions on Cedar and Pine Creeks will also be targeted for wood placement if the assessment/analysis determines it's appropriate (FIGURE 2 and 3).

Bull trout (fluvial life history) are found throughout the SF Skokomish but their numbers are extremely low and the population is considered at risk. The SF Skokomish provides spawning, rearing, foraging and overwintering habitat for this population. They are listed as "threatened".

The SF Skokomish was an important basin for the production of spring chinook salmon. They were relatively abundant up through the late 1950's but are now thought to be extinct (SaSi 1994). However anecdotal accounts of chinook adults in early summer continue to occur. In addition, Skokomish Tribal staff observed chinook adults in partial spawning colors in early July 2003 at the North and South Fork confluence. At that time only a few bright summer/fall chinook had even made it into the lower river. The SF Skokomish historically provided ideal holding, spawning and rearing habitat for spring chinook, which immigrated as yearlings (WDF 1957).

Steelhead are also proposed for listing and they inhabit the entire SF Skokomish upstream to the anadromous barrier near Rule Creek. The population has been steadily decreasing since the late 1980's. There are both summer and winter run steelhead that utilize the SF Skokomish for spawning and rearing.

Resident rainbow trout are found throughout the SF Skokomish River from the mouth upstream to the anadromous barrier. Rainbow are also found in some tributary streams. Coastal Cutthroat trout are found primarily in tributaries with smaller numbers occasionally found in the SF Skokomish River.

Worksite Location Data

What are the geographic coordinates of the work site(s) (in degrees, minutes and seconds)? [If you do not have them, you may leave this question blank.]

What is the township/range/section of the work site(s)?

T22N, R5W, Sections. 4, 9, 10, 15

T23N, R6W, various sections.

In what county(s) is the work site(s) located? In what city, if applicable? Mason County

In what Water Resource Inventory Area(s) (WRIA) is the work site located? (Provide WRIA name and WRIA number.) Skokomish-Dosewallips, WRIA 16

Is the work site on a stream and/or other waterbody? If yes, name the stream and/or waterbody. If the stream is a tributary of a larger stream, also name the larger stream. If you know the river mile, list it here.

South Fork Skokomish River between river miles 10 and 14. (bathtub-proposed reservoir reach) FIGURE 3. The SF Skokomish and the NF Skokomish River make up the Skokomish River mainstem. Tributary confluence's such as Church Creek (photo 5-7) at river mile 21.3 and Pine Creek and Cedar Creek (FIGURE 3) will also be assessed for wood additions.

Is your work site(s) located within estuarine or saltwater habitat? If so, name it. How close is it to fresh water systems? Name any other estuary or habitat adjacent to this site.

No, approximately 19 miles to Hood Canal.

Is the work site(s) located within a park, wildlife refuge, natural area preserve, or other recreation or habitat site? If yes, name the area.

Located within the Olympic National Forest.

9c. Application Questionnaire

Non-profit organizations must answer the following questions.

Is your organization registered as a non-profit with the Washington Secretary of State? If so, what is your Unified Business Identifier (UBI) number?

The Skokomish Indian Tribe is a sovereign nation.

What date was your organization created?

Treaty of Point No Point, 1855

How long has your organization been involved in salmon and habitat conservation?

Since time immemorial.

10. Work Site Information (ENTER ON PRISM TAB 9)

Driving Directions (provide directions that will enable staff to locate the project):

Driver north on Hwy 101 past Shelton to the Skokomish Valley. Turn left at the George Adams Salmon Hatchery onto Skokomish Valley Rod. Continue up the valley to the Govey Rd (23 Rd.) approximately 5.4 miles. Turn right onto Govey Road and follow signs to Brown Creek campground. Area of focus is upstream about .25 miles and downstream 3.75 miles. To locate tributary mouths, obtain map of forest and road network and follow mainline on the south of the river upstream to Harps Shelter near the mouth of Church Creek.

Current Landowner(s) of the site (name and address). Remember to complete the Landowner Willingness Form.

U.S. Forest Service Tacoma Public Utilities

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11. Permits

Check the appropriate boxes to indicate required and/or anticipated permits.

General permit information can be obtained at the Dept. of Ecology Permit Assistance Center 1-800-917-0043 or on their Internet site

http://www.ecy.wa.gov/programs/sea/pac/index.html. (ENTER ON PRISM TAB 10)

	Permits	Comments Regarding Permit Status
	Aquatic Lands Use Authorization (Dept of Natural Resources)	
	Building Permit (City/County)	
	Clear & Grade Permit (City/County)	
Х	Cultural Assessment [Section 106] (CTED-OAHP)	
	Dredge/Fill Permit [Section 10/404 or 404] (US Army Corps of Engineers)	
х	Endangered Species Act Compliance [ESA] (US Fish & Wildlife/NMFS)	USFWS and USFS to fulfill consultation requirements
	Forest Practices Application [Forest & Fish] (Dept of Natural Resources)	
	Health Permit (Dept of Health/County)	
Х	Hydraulics Project Approval [HPA] (Dept of Fish & Wildlife)	
Х	NEPA (Federal Agencies)	USFS to take lead on NEPA
	SEPA (Local or State Agencies)	
	Shoreline Permit (City/County)	
	Water Quality Certification [Section 401] (County/Dept of Ecology)	
	Water Rights/Well Drilling Permit (Dept of Ecology)	
	Other Required Permits (identify)	
	None – No permits Required	

12. Salmonid Species Information

Identify one or more targeted Salmonid species (directly on-site, indirectly downstream or within the rearing/migration corridor) whose habitat conditions you are attempting to improve or protect. Select one Primary Species.

(ENTER ON PRISM TAB 11)

Salmonid Species	Species Targeted (select as many as apply)	Primary Species (select only one)
Bull Trout	X	X
Chinook	X	
Chum		
Coho	X	
Cutthroat	X	
Pink		
Sockeye		
Steelhead	X	

13a. Habitat Factors Addressed

Identify one or more Habitat Factors being addressed by this Project and select one Primary Factor.

For definitions of Habitat Factors, see Manual 18b, Appendix B. (ENTER ON PRISM TAB 11)

Habitat Factors		Project Addresses (select as many as apply)	Primary Factor (select only one)
1.	Biological Processes		
2.	Channel Conditions	X	X
3.	Estuarine and Near-shore Habitat		
4.	Floodplain Conditions	X	
5.	Lake Habitat		
6.	Loss of Access to Spawning and Rearing Habitat	X	
7.	Riparian Conditions		
8.	Streambed Sediment Conditions		
9.	Water Quality		
10.	Water Quantity		

13b. Species/Habitat Factors Information Sources

For <u>Species Information</u> provide the source and indicate if the species listed are directly on-site at some point in their life stage (i.e. SaSI, WDFW Stream Catalog, Stream Survey/Field Observation, Limiting Factors Distribution Maps).

For <u>Habitat Factors Information</u> list the study/report and date identifying the habitat factors for your project (i.e. SaSI, limiting factors analysis, watershed analysis, other assessments or studies).

(ENTER ON PRISM TAB 11)

Study Name	Author	Date
WRIA 16 Limiting Factors Analysis	Washington Conservation Commission	June 2003
South Fork Skokomish Watershed Analysis	U.S. Forest Service	June 1995
South Fork Watershed Analysis	Simpson Timber Co. and Washington Department of Natural Resources	1997
Recovery Plan for the Coastal- Puget Sound Distinct Population Segment of Bull Trout. Volume 2, Olympic Peninsula Mgt. Unit.	U.S Fish and Wildlife Service	2004
Salmon Habitat Recovery Strategy for the Hood Canal and Eastern Strait of Juan de Fuca.	Hood Canal Coordinating Council	Version 9, 2005
Skokomish River Salmon Recovery Plan	Skokomish Tribe and Washington Department of Fish and Wildlife	In prep
SF Skokomish River and Church Creek Habitat Assessment	United States Forest Service	2006
Salmon and Steelhead Stock Inventory (SaSi)	Washington Department of Fisheries and Western Washington Treaty Tribes	2004
Problems that may arise with the construction of the South Fork Skokomish Hydroelectric Project	Washington Department of Fisheries	1957

14. Evaluation Proposal In-Stream Habitat

Applicants must respond to the following items. The local citizen and technical advisory groups will use the evaluation proposal to evaluate your project. Applicants should contact their lead entity for additional information that may be required.

Up to eight pages may be submitted for each project evaluation proposal.

(SUBMIT INFORMATION VIA PRISM ATTACHMENT PROCESS OR ON PAPER)

I. BACKGROUND

Describe the fish resources, the current habitat conditions, and other current and historic factors important to understanding this project. Be specific—avoid general statements. When possible, document your sources of information by citing specific studies and reports.

The South Fork Skokomish River is one of three main tributary streams making up the Skokomish River. The SF Skokomish, NF Skokomish and Vance Creek come together in the middle of the Skokomish Valley and form the mainstem Skokomish River. The Skokomish River flows through a fertile valley developed with farms and residential development. The lower 5 miles flow through the Skokomish Indian Reservation before emptying into the Great Bend area of Hood Canal (FIGURE 1).

The Skokomish basin has a long history of habitat problems including hydropower and flow diversion in the NF Skokomish River. Floodplain residential development, agriculture and flood control in the mainstem, lower SF Skokomish, lower NF Skokomish and Vance Creek.

The dominant land use in the SF Skokomish and Vance Creek basins is forestry. In 1946, the Simpson Timber Company and the U.S. Forest Service entered into an agreement called the Shelton Cooperative Sustained Yield Agreement. The agreement intended to last 100 years and provide a continuous and ample supply of forest products to local mills, was terminated in 2002 ending 50 years of aggressive industrial logging on USFS lands. Hundreds of miles of logging roads were carved into the hillsides, many of them on unstable slopes. Road failures and poor regeneration of many of the cut-over units have been highlighted as problems and are due to the historically poor logging practices.

Old growth forests have been replaced with roads and new forests. Riparian forests were logged over causing streambank erosion and combined with road failures, dumped tons of sediment into tributary streams. As timber harvests were being reduced in part due to spotted owl concerns, the USFS and others began to look for ways to assess the damage.

Two Watershed Analyses were performed in the 1990's. The US Forest Service completed an analysis in June 1995 to assess ecological functions and processes and to identify desired trends and restoration opportunities. Partners in this effort included the Skokomish Tribe, U.S. Fish and Wildlife Service and the Washington Department of Ecology. Other contributors included the Washington Department of Natural Resources, Washington Department of Fish and Wildlife, the U.S. Geological Service, Olympic National Park and several other environmental groups and NGO's. A later analysis was sponsored by the Simpson Timber Company (now Green Diamond Resource Company) and the Washington Department of Natural Resources in 1997 using the 1995 Washington State Watershed Analysis process, version 3.0 and 3.1. This process

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investigated watershed functions and determined casual mechanisms of forest management induced watershed impacts with new prescriptions adopted and applied to minimize and/or avoid those impacts.

Out of these analysis emerged several things. A set of new prescriptions for logging and road building on private timberland owned by Simpson Timber Company were adopted but these were soon replaced with prescriptions by their federally approved Habitat Conservation Plan (HCP). Simpson has changed its name to Green Diamond Resource Company and their HCP, approved in 2000, will guide their forest management through the next 50 years. The U.S. Forest Service manages their lands in accordance with the Federal Forest Plan and the analyses identified restoration needs on the forest including miles of road decommissioning, riparian enhancement and in channel enhancements.

The analysis indicated that the reach between the top of the canyon at Homan Flats and the mouth of LeBar Creek has poor instream habitat conditions with low levels of woody debris, primarily due to logging of the area in the 1950-70's to prepare if for a proposed hydroelectric dam and reservoir, which were never built. In addition, recreational use at campgrounds near Brown and LeBar Creeks has been known to collect woody debris for firewood, etc. further decreasing wood levels in this area. Adjacent riparian areas are growing back but still not of sufficient size and age to begin to recruit to the channel to any great extent. The area has an identified need for wood enhancements. Approximately 0.75 miles of the SF Skokomish River between Brown Creek and Homan flats is owned by the City of Tacoma and was to be the site of a hydropower dam and reservoir that was never licensed and constructed.

Bull trout, listed as threatened under the Endangered Species Act (ESA) are found throughout the SF Skokomish River and are considered to fluvial. However, bull trout have been recently in the lower mainstem Skokomish River, including areas affected by tides. Historically an anadromous bull trout life history was strategy was present in the watershed but the current life history is thought to be only fluvial (USFWS 2004). Spring chinook were plentiful in the SF Skokomish up through the late 1950's but evidence suggests that they are no longer present and thought to be extinct (SaSSI, Skokomish Tribe, Simpson Timber Co.). However, the Skokomish Tribe is planning to reintroduce spring chinook into the Skokomish basin in the future and the SF Skokomish will be an integral part of that recovery action (Skokomish Tribe in prep). Puget Sound steelhead have been proposed for listing under the ESA. They are found throughout the Skokomish River, including the SF Skokomish River. Their population is depressed and at risk (Federal Register 2006).

Resident rainbow trout and Coastal cutthroat trout are also found in the SF Skokomish River. Rainbows are concentrated primarily in the river and coastal cutthroat in the tributary streams.

II. PROBLEM STATEMENT

State the nature, source, and extent of the problem that this project will address and help solve. Address the primary causes of the problem, not just the symptoms. When possible, document your sources of information by citing specific studies and reports.

The goal of the project is to enhance natural woody debris loading in the SF Skokomish with a focal area being the proposed reservoir reach (FIGURE 3) between Homan Flats and the mouth of LeBar Creek (Photo 1-4). Other areas may be enhanced as well, and include the confluences of tributary streams such as Church (Photo 5-7), Cedar and Pine creeks where the USFS has

documented concerns with low flows and sub-surface channel conditions. The headwaters of these tributary streams have been heavily logged and roaded with high rates of road failures. Sediment from headwaters areas is thought to be impacting stream reaches near their confluences.

The primary cause of low levels of woody debris in the reach below LeBar Creek is historical land and stream clearing for a proposed hydropower dam and reservoir (USFS 1995, Simpson Timber Co 1997, WCC 2003). Also recreational use gathering firewood, etc. has further reduced woody debris supplied.

III. PROJECT OBJECTIVES

List the project's objectives. Objectives are statements of specific outcomes that typically can be measured or quantified over time. Objectives are more specific than goals (visions of the desired future condition) and less specific than tasks (the specific steps that would be taken to accomplish each of the objectives). For example, the objectives of an in-stream habitat project might be to increase channel complexity, to provide cover, to capture sediment, to reduce erosion, to create pools, and to reconnect side-channels or floodplain. Explain how achieving the objectives will address and help solve the problem identified in II above.

The project objectives are to restore high levels of functional woody debris in the reach that was cleared for the proposed reservoir. Project objectives of potential un-engineered log jam creation at tributary mouths are to encourage channel incision, to create pools and to provide connectivity of tributary surface flow into the SF Skokomish River.

The riparian forests in the LeBar to Homan Flats reach are beginning to achieve a level of maturity where LWD inputs can be expected. However, the timeframe to establish mature riparian conditions and subsequent channel conditions that reflect properly functioning conditions may take several more decades to centuries. Constructing log jams in this reach will provide the necessary channel functions until such time as the adjacent riparian stands begin to contribute woody debris.

Log jams near tributary mouths are intended to maintain channel connectivity, route coarse sediment and provide fish habitat by providing cover and complexity.

IV. PROJECT APPROACH

▶ Briefly describe the geographic setting of the project (marine nearshore, estuary, main stem, tributary, etc) and the life cycle stage(s) affected.

The project is located in the SF Skokomish River, which is a large tributary of the mainstem Skokomish River (FIGURE 2). All life stages (adult rearing, migration, spawning and incubation, juvenile rearing, overwintering) of fluvial bull trout will be affected by this project. Steelhead migration, spawning, incubation and juvenile rearing will be affected. Recovery and reintroduction a of spring chinook population is an important future aspect of the Skokomish Tribe's Salmon Recovery Plan (in prep) and their migration, adult staging, spawning, incubation and juvenile rearing will be affected. Coho salmon spawning, incubation, summer and overwintering will be affected. All life stages (adult rearing, migration, spawning and incubation, juvenile rearing, overwintering) for resident rainbow will also be affected.

List the individuals and methods used to identify the project and its location.

Besides the Skokomish Tribe, the U.S. Forest Service, Hood Canal Salmon Enhancement Group, Skokomish Watershed Action Team (SWAT) and constituent organizations and the Hood Canal Coordinating Council have been developing this project. Proposed project locations have been derived primarily from information contained in the two Watershed Analyses a WRIA 16 Limiting Factors Analysis and a recent USFS stream habitat survey. Additionally, forest service staff have documented concerns about disconnected tributary junctions and low flows they have encountered from area surveys.

Describe the consequences of not conducting this project at this time. For acquisition projects, also describe the current level and imminence of risk to habitat.

If the project is not conducted at this time, the slow, natural progression of riparian growth and subsequent mortality will take decades to centuries to provide enough LWD to bring the reach between LeBar and Homan flats into a properly functioning condition. Not attempting to deal with aggradation and pool filling at tributary junctions again relies on natural processes to scour out pools at these confluences.

- ▷ If project includes an acquisition element, then briefly describe the extent to which habitat to be acquired is currently fully functioning and/or needs restoration; the timeframe in which responses or improvements in habitat functioning are expected; and the continuity of the proposed acquisition with other protected or functioning habitat in the reach
- Describe the project design and how it will be implemented.

The project will be coordinated by a project oversight committee comprised of the Skokomish Tribe, USFS, Hood Canal Salmon Enhancement Group, the Hood Canal Coordinating Council, Tacoma Power, USFS and the Skokomish Watershed Action Team (SWAT). This group will create a conceptual design including site specific objectives for wood placement and construction approaches and techniques. The U.S. Forest Service will be responsible for ESA consultation and permitting of the project, finding, stockpiling and staging wood materials and post-project monitoring.

• Explain how the project's cost estimates were determined.

Costs were determined based on conversations with Columbia Helicopters out of Portland Oregon, a DRAFT grant application for National Fish Habitat Initiative funds as well as reviewing other similar wood projects in the Pacific Northwest. Since the logjams and structures are not engineered, costs will be lower than many similar projects.

• Describe other approaches and opportunities that were considered to achieve the project's objectives.

The only other approach considered is to allow natural watershed processes to provide the necessary levels of woody debris loading and channel response. The time required to achieve properly functioning conditions through natural watershed processes, particularly for the reach between LeBar Creek and Homan Flats, will be decades to centuries and is

deemed not acceptable. Bull trout are at a critical population threshold and need properly functioning habitat conditions for recovery. Similarly steelhead which have been proposed for listing and recovery of a viable spring chinook population will require recovery of habitat conditions.

• List project partners. When appropriate, include a letter from each participating partner briefly outlining its role and contribution to the project. (See Section 15 for a sample format.)

Partners include the Hood Canal Salmon Enhancement Group (NFHI grant for match) and the United States Forest Service for woody debris, permitting and post-project monitoring.

 List all landowner names. Include a signed form from each landowner acknowledging their property is proposed for SRFB funding consideration. (See Section 16 for a sample format.)

The United States Forest Service (USFS) is the primary landowner. Tacoma Public Utilities owns a critical parcel between Brown Creek and Homan Flats that includes about ³/₄ of mile of the SF Skokomish River. The USFS has been actively involved in this project. A landowner willingness form will be signed by Tacoma Public Utilities shortly.

Describe the long-term stewardship and maintenance obligations of the project.
 Projects should be consistent with habitat forming processes in the watershed, requiring reduced up-keep and long-term maintenance over time.

Since the project is primarily within the Olympic National Forest and the structures are intended to be non-engineered log jams and single piece woody debris structures, maintenance of the installations should not have to occur. Most of the structures will be placed with a helicopter and high flows will then have the ability to rearrange the pieces and jams. The USFS with assistance from other project partners will monitor the projects for effectiveness. Riparian forests and natural watershed processes will continue to provide additional benefits. This project is intended to provide high levels of woody debris in an attempt to bridge the timeframe gap or natural woody debris recruitment to the channel.

When known, identify the staff, consultants, and subcontractors that will be designing and implementing the project, including their names, qualifications, roles and responsibilities. If not yet known, describe the selection process.

Staff from the Skokomish Tribe, the USFS, Hood Canal Salmon Enhancement Group, Hood Canal Coordinating Council, Tacoma Power, USFWS and the Skokomish Watershed Action Team and its constituent organizations will comprise the "project oversight committee. Each entities technical staff of biologists, hydrologists and geomorphologists will be the primary entities developing the restoration strategies.

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It's likely that Columbia Helicopters out of Portland Oregon will be able to do the work. They do about 90% of the restoration projects in the Pacific Northwest that utilized helicopter support.

V. TASKS AND TIME SCHEDULE

List and describe the major tasks and time schedule you will use to complete the project. Describe your experience managing this type of project.

The primary tasks for this project will be to convene the "project oversight committee" and to gather all the relevant information including stereo pair air photos, data and maps from the two Watershed Analysis, habitat information and GIS products from the USFS and the Skokomish Tribe and other information that can be used to determine appropriate project actions. During this time the USFS and other partners will be locating and stockpiling woody debris for the project. Discuss project objectives with the City of Tacoma and work out an access agreement for any work that may occur on their lands located between Brown Creek and Homan Flats. The USFS will pursue NEPA and permits needed to for construction and log placement. It's anticipated that work will more than likely occur in summer 2008. If some aspects of the project are ready to go, work may occur as early as summer 2007.

The Skokomish Tribe has several on-going habitat improvement projects, some of which have been partially or wholly funded by SRFB. The Tribe has been successful in managing the SRFB grants for the Big Quilcene River by overseeing the completion of a Feasibility Study and pilot log jam creation. Tribal consultants are working on a critical phase of the Big Quilcene Channel Restoration Project and intend to go to construction in summer 2007.

The Skokomish Tribes Estuary projects which were awarded two SRFB grants are moving forward. Construction on the Nalley Slough project may begin soon with work focused on land within the diked reaches. Final construction of the Nalley Slough project will occur in 2007. Construction of the Nalley Island project will likely not occur until 2008.

VI. CONSTRAINTS AND UNCERTAINTIES

State any known constraints or uncertainties that may hinder successful completion of the project. Identify any possible problems, delays, or unanticipated expenses associated with project implementation. Explain how you will address these constraints.

There are two primary constraints related to this project. Maximum lift capabilities of Chinook helicopters are 20-26 thousand pounds or 10-13 tons. Through conversations with restoration practitioners and staff with Columbia Helicopters, a tree of approximately 26" - 27" DBH with a root wad and 60 foot stem is about 10-13 tons. A whole tree (top and branches) with a DBH of 29" – 36" without a root wad is also about 10-13 tons. Since the SF Skokomish is a large river capable of moving large trees, the largest trees that can be lifted will be necessary. Design and placement will need to consider stability and woody debris transport issues. Adding structure and complexity to existing wood features and jams may be an important factor to consider as well.

The other constraint is that the contracted helicopters will be on "fire-fighting" standby during the summer construction window. However, in conversations with Columbia Helicopters, if the project timing remains somewhat flexible they should be able to work around fire fighting requests. They have had success in recent years of devastating fires in fighting fires and completing restoration projects throughout the Pacific Northwest.

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15. Project Partner Contribution Form
Project Partner:
Partner Address: Hood Canal Salmon Enhancement Group
Contact Person
X Mr. □ Ms. Title
First Name: Neil Last Name: Werner
Contact Mailing Address: Hood Canal Salmon Enhancement Group Belfair, Washington
Contact E-Mail Address:
Description of contribution to project : Nation Fish Habitat Initiative grant (USFWS funds)
Estimated value to be contributed: \$80,000
Partner's signature Date

June 19, 2006

Project Partner: Partner Address: United State Forest Service		
Contact Person		
Mr. □ Ms. Title		
First Name: Last Name:		
Contact Mailing Address:		
3		
Contact E-Mail Address:		
Description of contribution to project: Value of wood for the log jams and woody debris structures, locating, staging the wood and post project monitoring.		
Estimated value to be contributed: \$90,000		
Partner's signature Date		

16. Landowner Willingness Form

Landowner Information:
Name of Landowner: U.S. Forest Service and Tacoma Public Utilities (forms will be sent in shortly)
Landowner Contact Information:
□ Mr. □ Ms. Title
First Name: Last
Contact Mailing Address:
Contact E-Mail Address:
Property Address or Location:
I certify that is the legal owner of property described in this grant (landowner or organization) application to the Salmon Recovery Funding Board (SRFB). I am aware the project is being proposed on said property. My signature authorizes the applicant listed below to seek funding for project implementation, however, does not represent authorization of project implementation. Landowner Signature Date
Project Applicant Information
Project Name: South Fork Skokomish River LWD Enhancement Project
Project Applicant Contact Information: x Mr.
Contact E-Mail Address: marty@skokomish.org

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